

Amendment to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amended): A device for adjusting rotation angles and capable of functioning as a switch comprising a stator, which has a receptacle which is open on one side and is approximately in the form of a pot, a rotor which is mounted on the stator, which is mounted on a holder with an open side of the stator receptacle of the stator receptacle facing the holder such that the rotor rotates in the stator receptacle as a rotary bearing[[,]] between at least two rotation angle positions, a magnet, which moves by means of the rotor, and a magnetic field sensor produces a signal in association with the magnet[[,]] which signal corresponds to the rotation angle position, wherein 1) the magnetic field sensor is arranged in the stator receptacle on the stator and/or is on a part which is mounted in the stator, such that the stator acts as a mount for the magnetic field sensor, 2) the magnet is arranged on the rotation axis of the rotor, ~~and~~ 3) the magnetic field sensor is a Hall sensor, which is two-dimensionally sensitive for magnetic fields parallel to its chip surface, and is mounted on the side of the stator receptacle, which faces away from the open side, and 4) the holder is a printed circuit board.

Claim 2 (Previously presented): The device for adjusting rotation angles as claimed in claim 1, wherein at least one of the stator and the rotor comprises plastic.

Claim 3 (Previously presented): The device for adjusting rotational angles as claimed in claim 1 wherein the rotor is located completely in the stator receptacle such that a surface of the stator receptacle, which is located in interior of the stator acts as a rotating bearing.

Appl. No. 10/647,121
Reply to Office Action of April 18, 2005

Claim 4 (Previously presented): The device for adjusting rotation angles claimed in claim 1, further comprising conductor tracks for electrical connection of the magnetic field sensor located in the stator.

Claim 5 (Currently amended): The device for adjusting rotation angles as claimed in claim 4, wherein the conductor tracks [(9)] are a stamped grid composed of metal.

Claim 6 (Previously presented): The device for adjusting rotation angles as claimed in claim 4, wherein the conductor tracks are incorporated in the stator in the form of an MID (Molded Interconnected Device) component.

Claim 7 (Previously presented): The device for adjusting rotation angles as claimed in claim 4, wherein the magnetic field sensor is an encapsulated chip with connections being soldered to the conductor tracks.

Claim 8 (Previously presented): The device for adjusting rotation angles as claimed in claim 4, wherein the magnetic field sensor is an unencapsulated chip, with bonding wires.

Claim 9 (Currently amended): The device for adjusting rotation angles as claimed in claim 1, wherein the stator [(2)] has an exterior, which is a housing.

Claim 10 (Previously presented): The device for adjusting rotation angles as claimed in claim 4 further comprising a printed circuit board provided with a panel for an electrical appliance with the conductor tracks in the stator making contact with the associated conductor tracks on the printed circuit board, and an electronic device for evaluation of the signals produced by the

magnetic field sensor, which is located on the printed circuit board.

Claim 11 (Previously presented): The device for adjusting rotation angles as claimed in claim 1, further comprising on the open side of the stator receptacle, a recess for the insertion of a handle by means of a shaft.

Claim 12 (Currently amended): The device for adjusting rotation angles as claimed in claim 32, wherein ~~the~~ a handle is located on a side of the holder which faces away from the housing, and in that an opening which corresponds to the open side of the receptacle in the stator ~~[[2]]~~ is located in the holder, through which opening the shaft passes for insertion into the recess.

Claim 13 (Currently amended): The device for adjusting rotation angles as claimed in claim 1, wherein ~~the~~ rotation angle positions of the rotor are latching positions.

Claim 14 (Previously presented): The device for adjusting rotation angles as claimed in claim 9, further comprising an electrical switch located in the housing.

Claim 15 (Currently amended): The device for adjusting rotation angles as claimed in claim 1, further comprising an intermediate piece where the magnet ~~[[4]]~~ is mounted, which intermediate piece is mounted on the rotor, such that it can rotate.

Claim 16 (Currently amended): ~~The device for adjusting rotation angles, as claimed in claim 1~~
A device for adjusting rotation angles comprising a stator, which has a receptacle which is open on one side and is approximately in the form of a pot, a rotor which is mounted on the stator such that the rotor rotates in the stator receptacle as a rotary bearing, between at least two rotation angle positions, a magnet, which moves by means of the rotor, and a magnetic field sensor produces a signal in association with the magnet, which signal corresponds to the

rotation angle position, wherein 1) the magnetic field sensor is arranged in the stator receptacle on the stator and/or is on a part which is mounted in the stator, such that the stator acts as a mount for the magnetic field sensor, 2) the magnet is arranged on the rotation axis of the rotor, and 3) the magnetic field sensor is a Hall sensor, which is two-dimensionally sensitive for magnetic fields parallel to its chip surface, and is mounted on the side of the stator receptacle, which faces away from the open side, wherein the magnet is adjustable so that its position with respect to the rotor can be varied so as to allow adjustment of the position of the magnet when the rotor is in one rotation angle position.

Claim 17 (Previously presented): The device for adjusting rotation angles as claimed in claim 16, wherein the magnet is mounted in a receptacle on the rotor such that it can rotate, which receptacle faces the magnetic field sensor, in the rotor.

Claim 18 (Previously presented): The device for adjusting rotation angles as claimed in claim 16, further comprising an adjusting means for adjusting the position of the magnet arranged between the magnet and the rotor.

Claim 19 (Previously presented): The device for adjusting rotation angles as claimed in claim 16, wherein the magnet is accessible for adjustment from the outside of the stator through a the stator receptacle which is open on one side and which stator receptacle is used as a rotating bearing for the rotor.

Claim 20 (Previously presented): The device for adjusting rotation angles as claimed in claim 34 wherein the aperture extends from that surface of the rotor which faces the open side of the receptacle to the magnet and/or to the intermediate piece, and in that a slot is located in the

Appl. No. 10/647,121
Reply to Office Action of April 18, 2005

magnet and/or in the intermediate piece.

Claim 21 (Currently amended): The device for adjusting rotation angles as claimed in claim 33, wherein ~~the adjusted position of~~ the magnet and/or the intermediate piece is connected to the rotor by adhesively bonding, welding or casting after adjustment.

Claim 22 (Previously presented): The device for adjusting rotation angles as claimed in claim 33 wherein the magnet (4) is composed of a material which has magnetic particles and plastic.

Claim 23 (Previously presented): The device for adjusting rotation angles as claimed in claim 1 wherein the device is an electrical rotary switch.

Claim 24 (Previously presented): The device for adjusting rotation angles as claimed in claim 1 wherein the plastic is a thermoplastic or polyamide and the stator and/or the rotor are/is produced as an injection-molded part and the magnet is a cylindrical permanent magnet which is magnetized two-dimensionally or diametrically.

Claim 25 (Currently amended): ~~The device for adjusting rotation angles as claimed in claim 1~~
A device for adjusting rotation angles comprising a stator, which has a receptacle which is open on one side and is approximately in the form of a pot, a rotor which is mounted on the stator such that the rotor rotates in the stator receptacle as a rotary bearing, between at least two rotation angle positions, a magnet, which moves by means of the rotor, and a magnetic field sensor produces a signal in association with the magnet, which signal corresponds to the rotation angle position, wherein 1) the magnetic field sensor is arranged in the stator receptacle on the stator and/or is on a part which is mounted in the stator, such that the stator acts as a mount for the magnetic field sensor, 2) the magnet is arranged on the rotation axis of the rotor,

and 3) the magnetic field sensor is a Hall sensor, which is two-dimensionally sensitive for magnetic fields parallel to its chip surface, and is mounted on the side of the stator receptacle, which faces away from the open side, wherein the position of the magnet is adjustable relative to the rotor.

Claim 26 (Previously presented): The device for adjusting rotation angles as claimed in claim 1 further comprising latching elements which interact between the stator and the rotor such that the rotor is secured in the stator receptacle such that it can not fall out.

Claim 27 (Previously presented): The device for adjusting rotation angles as claimed in claim 4 wherein the position of the conductor tracks extend into the stator receptacle, with the conductor tracks being the part that is mounted in the stator, for arrangement of the magnetic field sensor.

Claim 28 (Previously presented): The device for adjusting rotation angles as claimed in claim 5 wherein the stamped grid is formed by being injected into the plastic for the injection molded part during the production of the stator.

Claim 29 (Previously presented): The device for adjusting rotation angles as claimed in claim 6 wherein the incorporation in the stator in the form of an MID (Molded Interconnected Device) component is by means of metalized plastic for the conductor tracks.

Claim 30 (Previously presented): The device for adjusting rotation angles as claimed in claim 7 wherein the encapsulated chip with connections is in the form of an SMD (Surface Mounted Device) component.

Claim 31 (Previously presented): The device for adjusting rotation angles as claimed in claim 8, wherein the bonding wires are welded to the chip at the conductor tracks.

Claim 32 (Previously presented): The device for adjusting rotation angles as claimed in claim 9, further comprising latching and/or snap-action hooks arranged on the housing in order to mount the stator on a holder with the open side of the stator receptacle facing the holder.

Claim 33 (Previously presented): The device for adjusting rotation angles as claimed in claim 18, wherein the adjusting means is an intermediate piece which is mounted in a receptacle on the rotor such that it can rotate, and with the magnet being mounted on the intermediate piece.

Claim 34 (Previously presented): The device for adjusting rotation angles as claimed in claim 19, further comprising an aperture located in the rotor.

Claim 35 (Previously presented): The device for adjusting rotation angles as claimed in claim 20, the adjustment is permitted via the aperture by means of a tool which engages in the slot.

Claim 36 (Previously presented): The device for adjusting rotation angles as claimed in claim 22, wherein the material being molded is injection molded as the intermediate piece and the magnet.